

College of Agricultural, Consumer and Environmental Sciences



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Runny Nose? Scratchy Eyes? Is It Allergies?

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Nationally, more than 50 million Americans suffer from allergies every year
 ~ Centers for Disease Control and Prevention



What are allergies?

An allergy is an unusual reaction to like a food or a plant, which is normally harmless. Common signs of allergies are a stuffy or runny nose, coughing, hives, itching, a rash, or puffy eyes.



Who's at risk?

Anyone can have an allergy. Children who suffer with allergies sometimes outgrow them. Adults can develop allergies later in life.

How serious are allergies?

Allergy symptoms range from mild to moderate. For most people, over-the-counter allergy medicines are used to control the symptoms. If you have underlying health conditions (such

as high blood pressure), make certain to talk to your doctor before taking any medicines. Popular medicines for treating allergy symptoms include:

- Sudafed
- Zyrtec
- Allegra
- Claritin



For some people, allergies can be deadly. Take for example a person who is very allergic to peanuts. When this person comes into contact with peanuts, they may experience a drop in blood pressure, their breathing tubes may swell up, and they can die from lack of air. This severe reaction is known as “anaphylaxis” (acaai.org). People with severe allergies may need to carry emergency medicine.

What causes allergies?

Things that can set off allergies are called “allergens.” Common allergens include pollen (from trees and flowers) and dander (skin flakes from cats, dogs and other pets). Also, some people are allergic to pests such as roaches, rodents or dust mites. Dust mites are tiny insects that you can’t see. They live everywhere – in carpets, upholstered furniture, stuffed animals and bedding. A clean and healthy home is the first line of defense to combat allergies.



Are allergies a chronic illness?

Allergies are listed as the 6th leading cause of chronic illness in the U.S. (Centers for Disease Control and Prevention). A chronic illness is defined as a health condition that continues for a long time – usually lasting 3 months or more (www.medicinenet.net.com). Generally, chronic diseases are not prevented by vaccines and are not cured by medication. And, they don’t disappear over time. Chronic means “constant.” Examples of chronic diseases include arthritis, cancer, and diabetes.

How are allergies considered a chronic illness?

Allergies can be considered a chronic disease when they result in such conditions as sinusitis and asthma. Sinusitis is an infection that occurs when nasal cavities become infected, swollen, and inflamed. Symptoms of sinusitis include facial pain; a discharge from the nose that can be cloudy, green, or yellow; and not being able to breathe through your nose. Sinusitis can be either acute or chronic:

- Acute sinusitis lasts a short time – less than four weeks. The illness is usually part of a cold or a respiratory illness. A respiratory illness is one that affects the lungs and the airway system.
- Chronic sinusitis occurs when the infection lasts for more than twelve weeks or returns often.

How can allergies be prevented?

Generally, allergies cannot be prevented but the allergic reactions can be avoided or minimized. When a person identifies a substance that causes allergic reactions, steps can be taken to avoid the substance. For instance, using the air conditioner during peak hay-fever season instead of opening windows and doors will reduce the amount of pollen in the home. Food allergies can be avoided by looking closely at food product nutrition labels and staying aware of how foods are prepared. The bottom line is if you have allergies that negatively impact your quality of life, it’s important to find out what causes them and how to take care of them. A doctor can conduct tests to help identify and treat any allergies.

The Benefits of Strength Training and Tips for Getting Started

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Most of us know that getting enough exercise in our lives is important to our health; however, we may not know exactly how to get started or what kind of exercise is recommended. There are different forms of exercise and each has its own unique benefits to our health and our quality of life. The primary types of exercise are aerobic, strength, and flexibility training. They each have their own benefits and they are all important when it comes to staying healthy for as long as possible.

This article will focus on strength training, which is often times neglected when it comes to our exercise routines. Many people think that strength training is only important when you are young, that it is only for men, or that you should only do it when you are trying to bulk up your muscles, but that simply isn't true. All people can benefit from strength training at any age and it is easier to implement than you think.

Definition of Strength Training

Strength training is a type of exercise that improves muscular fitness through the use of resistance to the muscle. It involves activities that make your muscles do more work than they typically do. In other words, they are activities that overload the muscles. An exercise counts as strength training if it involves moderate to high level effort and if it works major muscle groups of the body.



How People Can Benefit from Strength Training

There are several benefits that strength training can provide in our lives. Here are some of the most important ones:

- **Muscle mass.** As we age, we lose muscle mass. Strength training can help you to maintain and fight against the loss of muscle mass.
- **Osteoporosis.** Strength training can help prevent osteoporosis by increasing bone mass and bone strength.
- **Arthritis.** Strength training can reduce pain and disability associated with arthritis and slow or reverse bone mass loss in arthritis.
- **Heart disease.** Strength training can decrease the risk of heart disease by improving cholesterol and lowering blood pressure. It also decreases the stress placed on the heart when lifting or moving objects.
- **Overweight/obesity.** Strength training can help to lower body fat levels or improve body composition. It can also help us maintain muscle mass during weight loss efforts.
- **Daily activities.** Regular strength training lowers the risk of having limitations in daily activities due to a lack of muscular fitness. These daily activities might include, carrying children or groceries, climbing up and down stairs, moving furniture or heavy boxes, engaging in sporting activities or hiking, and even standing for long periods of time.
- **Blood sugar.** Strength training can improve blood sugars and improve the use of insulin in the body.
- **Psychological stress.** Strength training on a regular basis may reduce the symptoms associated with depression and anxiety and may also help reduce fatigue. It can also contribute to improved self-esteem.
- **Brain.** Strength training can improve memory and thinking skills.

Ways to Do Strength Training

There are many ways to accomplish strength training. The primary methods used are:

- Free weights
- Machines and cables
- Bands, tubes, medicine balls, and other portable tools
- Body weight



There is no one better way to strength train. The most important principle is to challenge the muscles to do more work than they normally do. You do not have to stick with only one method of strength training. You can mix up the methods you use each time you work out or even mix up the methods within one particular workout. You have as many options as you would like. The type of method(s) you decide on for strength training may depend on personal preference, access and availability, convenience, or comfort level with the different methods. It is important to choose methods that are safe and practical for you. Machine-based exercises are generally safer for beginners than free weights due to more stability and less reliance on coordination and balance. As muscular fitness improves, free weights can be incorporated into fitness routines.

Strength training should target the major muscle groups: chest, back, legs, shoulders, biceps, triceps, and the trunk/core. Begin with the large muscle groups (chest, back, and legs) before moving to smaller muscle groups for a more effective workout. It is recommended that you vary your exercises in such a way that you do some that use multiple muscles at one time and some that isolate specific muscles individually. Complete body training of all muscle groups helps to reduce muscular imbalances that can lead to injury.

For each exercise:

- Use proper form and technique (be sure that you are in the correct stance or have the right settings on the machine).
- Use controlled movements (do not swing weights or use momentum to lift weights or your body weight).
- Use full range of motion of the joint (do not stop short of the beginning or ending point of the exercise movement).
- Use proper breathing techniques (**exhale** during the exertion portion of the repetition).

Recommendations for How to Strength Train

The focus in this article is for adults who want general strength training recommendations to improve overall muscular fitness. The recommendations here are not for advanced strength training regimens. The recommendations provided here are appropriate for men and women of all ages. Older persons or frail people should begin with lighter resistance and a greater number of repetitions until muscular conditioning improves, then can increase resistance and follow the typical recommendations provided.

Number of Repetitions

Repetitions or **reps** refer to the number of times you perform the exercise.

To emphasize muscular strength and size:

- 8-12 reps per set that induces muscular fatigue (to the point in which another repetition would be difficult to do without help)
- 2-3 minutes of rest in between sets

To emphasize muscular endurance:

- 15-20 reps per set that induces muscular fatigue
- 1-2 minutes of rest in between sets
- no more than 2 sets per exercise

Number of Sets

Sets refer to the number of cycles you do of the reps.

Most people benefit from 2-4 sets of exercises per muscle group. For beginners and/or older individuals, 1 set per muscle group can be beneficial to get started. One exercise can be used for the 2-4 sets or several different exercises, whatever is preferred.

Progressive increases in the amount of resistance over time is ideal to strengthen muscles.

Number of Days per Week

- Strength training of each muscle group is recommended two to three times per week.
- Whole body workout sessions are recommended, so that all muscles are trained at least 2 times per week.
- 48- to 72-hours of rest time in between training sessions is recommended.

Improvements gained through strength training reverse quickly when you stop engaging in strength training; therefore, staying consistent with these routines is critical.

Below are examples of a beginner workout and an intermediate/advanced workout. Note that these are just examples. Number of total sets can vary from 8 up to 30 or more and anything in between. Generally, the more advanced you are the greater number of sets required to challenge the muscles.

	Beginner	Intermediate/Advanced
Chest	Push-ups: 1 set x 12 reps	Bench press: 2 sets x 8-10 reps
	Chest Fly machine: 1 set x 10 reps	Chest fly dumbbell: 2 sets x 8-10 reps
Back	Cable rows: 1 set x 12 reps	Pull-ups: 2 sets 8-10 reps
	Assisted pull-ups: 1 set x 10 reps	Bent over rows: 2 sets x 10 reps
Legs	Leg extensions: 1 set x 12 reps	Squats: 2 sets x 10 reps
	Leg curls: 1 set x 12 reps	Lunges: 2 sets x 8-10 reps
Shoulders	Overhead press: 1 set x 12 reps	Military press: 2 sets x 10 reps
		Lateral raises: 2 sets x 8-10 reps
Biceps	Dumbbell curls: 1 set x 10 reps	Preacher curls: 2 sets x 8 reps
		Concentration curls: 1 set x 10 reps
Triceps	Cable pushdowns: 1 set x 10 reps	Overhead extensions: 2 sets x 10 reps
		Triceps dips: 1 set x 12 reps
Core	Crunches: 1 set x 15 reps	Russian twists with weight: 2 sets x 12 reps
	Superman: 1 set x 15 reps	Hyperextensions: 2 sets x 12 reps
		Plank: 2 sets x 30 seconds
Total	11 sets	28 sets

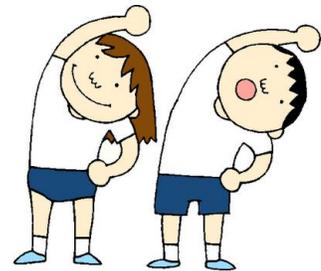
Preventing Injury

Warm-up: Begin each exercise of a new muscle group with a lighter resistance and higher number of repetitions.

- **Stretching:** Stretch any muscle worked at the end of the exercise session. Generally, you will need to stretch every major muscle group at the end if you have completed a full body workout as recommended here.
- **Gradual progression of volume and intensity:** Increase slowly over time the amount of resistance and the number of sets.
- **Choose appropriate exercises:** If you are working out alone without a partner, avoid exercises in which you might need a spot from a partner.
- **Use equipment properly:** Ask for help if you do not know how to use equipment or are not sure of the proper settings. Avoid equipment you do not know how to use.
- **Use correct form and technique for each exercise.**
- **Listen to your body:** stop if you feel pain or anything that does not feel right.

Tips for Overcoming Barriers and Incorporating Strength Training in Your Life

- Find a partner to workout with.
- Attend a group fitness class that emphasizes strength training.
- Make the exercises accessible and fun.
- Choose exercises that are convenient and practical in your environment.
- Break up your workout into segments throughout the day if you are at home. It does not have to be done all at one time.
- Do your exercises at home during your favorite shows.
- Schedule your exercise sessions in your day just like you would any other important appointment.
- Pack your gym clothes ahead of time and have them ready to go when you start your day.
- Download free apps on your phone for body weight workouts. If you don't do your regular routine, you can always do a body weight workout in 12 minutes or less.



Before Getting Started

Speak with your doctor to ensure that you do not have any medical conditions that would limit your ability to engage in strength training. Strength training may not be recommended if you experience chest pain, lose your balance due to dizziness, or have specific medical conditions. You may also need to modify the types of exercises you do if you have a bone or joint problem that could be aggravated or worsened by certain types of exercises. If you are cleared for exercise by your doctor but experience pain or discomfort during exercise, you should discontinue the exercise and consult with your doctor.

References available upon request.

Easy Ways to Grow your Savings

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Does your money seem to fly out of your hands as quickly as it arrives? If so, you are not alone. Most of us feel that way at some point in our lives. There is no magic solution to this problem; it just requires a different mindset and habit. The inability to achieve financial goals, financial insecurity in later life, and increased expenses lead to stress when emergencies or unexpected events happen. We can end up losing our homes and standard of living when we lose our job. Having a savings provides a pot of money to achieve your financial goals and take care of your future self.



By saving, you increase self-awareness and emotional intelligence. When you can pay yourself first and delay gratification, you learn self-discipline that bleeds over into other areas of life. You have more control over your health, relationships, and other key areas of life. The ability to achieve financial goals leads to financial security in later life, reduced stress when agencies happen, and peace of mind. Having savings can help your marriage by lowering the amount of arguments that occur due to lack of money. Savings also gives you more options in life. Some examples might be to buy a new home, change jobs, retire, start a business, and make gifts to others. To help you along the way, here are ten tips to assist you in growing your personal savings.

#1 Set Goals – What are you saving for? Goals could include building an emergency fund, saving for a down payment on a house, or reversing a trend of increasing debt. It is helpful to create a roadmap for handling your money: Spending, saving, using credit and investing. Set your goals and make them reasonable – unrealistic goals will just discourage you. People who follow their roadmaps are able to live comfortably and purchase things without guilt or stress. Those who do not have a plan often worry about having enough money for the things they need and want.



Even though financial planning can have a big impact on the quality of life, it is pretty simple to do. In fact, making clear, meaningful goals boils down to five steps:

S PECIFIC	What <u>exactly</u> is it you want to achieve?
M EASURABLE	How can you measure and track the progress of the goal?
A TTAINABLE	Is it actually attainable in the given time frame?
R ELEVANT	Is it something that you really want to do? Will it directly benefit you?
T IME BOUND	When do you want to achieve this goal by?

#2 Make a Plan – Outline a plan to meet your goals, in terms of saving a percentage of your savings goal by a specific time. If you do not put a time limit to the plan, your goals will always get pushed back to sometime in the future. The

easiest and most effective way to save is **automatically**. This is how millions of employees save through 401(k) and other retirement programs at work. It is also how millions of Americans save at their bank or credit union. You should always start small by creating a realistic goal with a realistic timeline. You will find you don't miss the money, you'll get excited on how fast it is growing, and you'll want to add more when possible. Make it a game; get family and friends involved. Surround yourself with others who want to win financially instead of those who are often looking for ways to spend their money.



#3 Define Needs vs. Wants – This can be difficult but it is necessary. If you find you cannot pay your bills, think if you really need a premium cable TV package? Down deep, you know what your priorities should be. The key to saving and winning financially is to know where your money is going. This makes you aware and empowers you to make decisions, to act on your money rather than let your money act on you. You decide. Redirecting money to its highest and best use vs. having no idea where it went.

Depending on if you utilize technology, or would rather track your spending the traditional way, there are many options you can use depending on your preference. Mint.com is a simple personal financial program that's web-based. It's free to sign up and only takes a few seconds to add new accounts. Every time you visit their site, your financial data gets updated automatically when it connects to your personal bank accounts. It presents your financial information in a slick easy-to-use web interface, with detailed graphs. It's very helpful for modern day budgeting, creating goals and aggregating all your financial accounts in one place. Mint's dashboard gives a quick summary of your personal finances at a glance. For a more traditional approach, you can track your spending using our "Track your spending" worksheet.

#4 Create Budgets and Stick to Them – Assess your income and expenses realistically, and make budgets. If you make weekly or monthly budgets, do not forget about large annual expenses, such as tax bills or insurance payments. Leave room for an occasional treat as you can afford it to avoid getting discouraged. To easily create a budget online you can use one of the following resources.

- www.mint.com
- <https://www.youneedabudget.com/>
- <https://www.daveramsey.com/everydollar>

Some people find it easy to use the cash budget using envelopes separating each of your expenses to use each month. The envelope system is when you use cash for different categories of your budget, and this cash is distributed into separate envelopes to help you stay on track. It allows you to see exactly how much money you have left in a given category by the cash that remains on hand. When the envelope is empty, you are either done spending in this category or you have to move money from another envelope into the appropriate one. By using this method, you will only use the cash that you have budgeted for each category. Be sure to put money into savings first and then live off of what you have left. Savings usually is a result of decreased spending rather than increased income.

Easy Ways to Decrease Everyday Spending

- Internet, TV - call, compare, ask for deals
- Phone - cell and home
- Insurances - compare premiums, look at higher deductibles
- Credit - checking report, improving credit
- Fees – eliminating fees on bank accounts, late fees, etc.
- Snacks, coffee, soda, bottled water – reduce or eliminate or buy at grocery store in bulk
- Eating out - reduce the amount you spend each month



- Comparison shopping - food, clothing, etc. It is good to compare but only buy things you need, not because it is on sale or a “good deal.”
- Limit spending on gifts
- Pay off high-interest debt
- Gas – limit driving
- Unused gym memberships – either go or stop paying and workout at home

#5 Create a Second Savings Account – It may help to create a second savings account that serves as your “piggy bank.” This savings account should be used to save for specific goals or to build an emergency fund. With direct deposit, you may be able to have a portion of your paycheck sent to this account. After some time, you may “forget” about it with respect to the daily bills and the temptation to overspend will be reduced.

#6 Pay Yourself – Treat yourself as if you were just another person to whom you owe money because in essence, you are. Pay your “bill” to yourself regularly every month and include that as part of your budget. Use direct deposit if the resources are available. Should you miss a “payment,” charge yourself a “penalty” to be included in the next month’s deposit. All this “pay” should go either into your second savings account or immediately into some form of investment. These investments can range from low-risk, high-yield savings or money market accounts to higher yielding investments like stocks and bonds. Regardless of the investment vehicle, what matters most is that you set this money aside. If you enjoy utilizing technology, the Acorns app (www.acorns.com) or Digit (www.digit.co/) invests your spare change. It rounds-up to the nearest dollar every credit card purchase and micro-invests the difference into a separate bank account. The money can be used to invest very small amounts of money into these market accounts.

#7 Minimize Withdrawals and Transfers – Even if there are no charges for moving your money around, treat your money as if it were less accessible than it really is. That way you will be less tempted to stop at the ATM for impulse purchase money.

#8 Manage Your Debt – If you have high-interest credit card charges, pay them off as soon as possible. As you pay off a debt, transfer at least some portion of that regular payment you used to make into your savings account to avoid spending temptations.

#9 Take Advantage of Discounts – You do not have to be an extreme couponer, but there is no reason not to take advantage of discounts available to you in anything you purchase. Many wealthy people attain and maintain wealth because they do not pay any more than they have to. Take advantage of your local newspaper coupons, shop grocery advertisements, and save money on everyday expenses. You will be surprised how much money you can save each month using these resources.



#10 Minimize Use of Credit – Credit is essential at times, but easy credit also can mean easy overspending. If possible, never charge more to a credit card than you can afford to pay at the end of the month. Using credit comes with a price, and the biggest part of that price is usually the interest rate. By spending too much on your credit card, you will gain interest charges which can add up over a period of time. Shop around for credit cards with low APR rates and avoid companies that offer teaser rates. For example, credit cards that offer no interest for 6 months. Ensure you read the fine print to shop around for the lowest interest rate rather than falling for the introductory offers many credit card companies offer. Saving is primarily a mindset and an attitude. It will get easier as you practice it on a daily basis and as you see the rewards from consistent saving. As you build the habit of saving, you will be able to accomplish your financial goals.

Want to learn more about how to make saving money easy and automatic? Watch our *Easy Ways to Grow your Savings* webinar here – <https://www.youtube.com/watch?v=CnAx0egV0NM>

In this webinar you will learn:

- why we want to save
- why we tend to not save
- the benefits of saving and consequences of not saving
- how to improve our saving behavior
- tools to use to make saving easy and automatic

The Bottom Line – Start small and begin today. Select an idea above that you can implement right away. As you take steps to save, your financial outlook will improve and your financial stress will decrease. You will get excited about saving and will begin to make other changes in your life to help increase the amount you are saving each month. Make it a game. Have fun. Start saving today!

Stay on Track While Eating Out

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Extension Diabetes Coordinator

People with diabetes may find it easier to follow healthy eating patterns at home, but it is possible to have balanced, nutritious meals in restaurants also. With some extra planning, you can enjoy special occasions of eating out and still manage your diabetes.

It Pays to Plan

Timing. Ask others if they will eat when you normally do. You may want to meet at the restaurant 20-30 minutes earlier so your meal is ready at the usual time. Make a reservation if possible to avoid delays. If your party needs to eat at a later time, have a snack at your normal meal time, and either give away a carbohydrate serving later or take it home to enjoy at another meal.

Location. You may want to choose a restaurant that has more than 20 locations. Chains with that many locations are required by law to post calories on the menus and must provide customers with the following written nutrition information upon request:

- Total Calories
- Calories from fat
- Total fat
- Saturated fat
- Trans fat
- Cholesterol
- Sodium
- Total carbohydrates
- Fiber
- Sugars
- Protein



Stop by the restaurant earlier in the week and ask for a copy of their nutrition information so you can pick options that fit your meal plan without being rushed. While there, ask if they will handle special requests.

Satisfaction. Before going, take time to think about what you really want. Then fit it into your meal plan. For example, if you love the bread at the restaurant, plan to have one roll or breadstick and skip or adjust other carbohydrate servings as needed. If you know you will want dessert, cut back on carbohydrates in your meal and share the dessert with others. Go on a walk after dinner.

Tips for Ordering

Appetizers. Many restaurants provide bread or chips and salsa when you arrive. If you did not plan them into your meal, ask the waiter not to bring them. It is often best to skip appetizers, especially if the restaurant offers only high fat options. Broth-based soups or garden salads with dressing on the side are some healthier choices for appetizers.



Ask away. Servers are your source of information you cannot find on the menu. If you are not sure how a food is prepared, ask. Is it prepared with butter or added salt? You can ask if ingredients can be left out and if entrees can be baked, grilled, or broiled instead of fried.

Restaurants often allow substitutions, and your server wants to please you. Ask if you can substitute healthy items for ones that do not fit into your plan. For example, ask for half a serving of black beans instead of refried beans or for steamed vegetables or a salad instead of rice or fries.

Healthier options. Find ways to make your meal healthier. Feel free to get creative. Here are a few tips:

- Avoid breaded or fried foods. If you must have them, remove the breading or fried layer.
- Ask if low-fat sauces and salad dressings are available, and ask for all sauces on the side. To reduce the amount of sauce you eat without sacrificing flavor, dip your fork in the sauce, and then put it into the food.
- Ask that your foods be prepared without butter, and ask for a lemon wedge, salsa, or pico de gallo on the side so you can add flavor if needed.
- Choose beverages that have no or low calories. If you plan to have alcohol, limit it to one serving and avoid mixers that have added sugar. Be sure to include the carbohydrates in your meal count.

Enjoy Sensible Portions

Serving sizes at restaurants are almost always larger than what you would eat at home. Try to eat the amount you normally would at a meal. Here are a few suggestions that may help:

- Order an appetizer instead of an entrée (only if healthy appetizers are available).
- Ask if you can order a lunch-sized portion of entrées high in carbohydrates, eat half, and take the rest home for another day.
- Split an entrée with another person, or ask for a box with your meal and pack half of the meal in the box to take home before you begin eating.
- If ordering a sandwich, choose a half portion with soup or a salad.

Buffets and Fast Food Restaurants

It can be tempting to eat too much at these kinds of restaurants, so consider your choices carefully before you begin to serve yourself or order. When at a buffet, eat slowly and choose mostly vegetable dishes. Stop when you feel satisfied, not full. At fast food restaurants, choose meals with fewer than 400-500 calories, 20 grams fat, and 800 milligrams of sodium. Kid's meals are often the best choice. Order fresh fruit or veggies as the sides instead of fried foods. Again, choose beverages that have no or low calories.

Appreciate Your Company

In all cases, take your time eating and enjoy conversation with your family and friends. Suggest going on a walk, window-shopping, or dancing after eating. You can bring a chilled cooler in your car so your leftovers will not spoil while you make the most of your time together.

Resources available upon request.

The Power of Hemp Seeds and How To Incorporate Them Into Your Diet

Ilian Garcia, Nutrition Student

Hemp seeds are defined as a super food; they are one of the few plant foods containing the proper proportion of all nine essential amino acids and omega-3 fatty acids. Hemp also called industrial hemp, plant of the family Cannabaceae cultivated for its fiber.

Hemp seeds contain 10 grams of protein per ounce and are good source polyunsaturated fats. People with gluten sensitivity can use hemp seeds as a substitute for breadcrumbs to coat chicken or fish. You can also hemp seed milk by blending the hemp seeds with water which creates an alternative to dairy milk in drinks. Hemp seeds make a great substitute for people that have nut allergies.

1 Tbsp of hemp seeds contains 40 calories, 152 milligrams of potassium, 2.3 grams of carbohydrates, 1.6 grams of fiber, 5.3 grams of protein, 13% of the daily value of iron and 8% of your daily Vitamin A.

“Hearts” are shelled versions of this rounded seed with a texture similar of pine nuts and a mild grassy. The protein content in hemp hearts can be of significant benefit to vegetarians, athletes and anyone looking to add a healthy source of protein to their diet. Hemp seeds contain both soluble and insoluble fibers, which help regulate blood sugar level, control cholesterol, and keeps digestive tract moving smoothly. Hemp seeds can be consumed by adding 1Tbsp of them in salad dressing, smoothies, or cereals.

Hemp seeds can be found in any Walmart, Walgreens, or any other supermarket that has a wide stock of nutritional seeds. Once opened, you can expect a bag of hemp seeds to last for about a year in the refrigerator or freezer. If you keep a package in your pantry, however, that shelf life will be more like 3 to 4 months.



Photo: Vegkitchen.com



Here is a recipe you can try using hemp:

Recipe for Banana Chocolate Chip Hemp Muffins

- 1 1/2 cups almond meal
- 1/2 cup Just Hemp 50% Hemp Protein Powder
- 1/4 teaspoon salt
- 1/2 cup granulated sugar
- 1/4 cup light brown sugar
- 1 teaspoon baking soda
- 3 ripe bananas, mashed
- 1/4 cup applesauce
- 1/4 cup low-fat buttermilk
- 1 egg
- 1 teaspoon vanilla extract
- 3 tablespoons mini dark chocolate chips

Preheat oven to 400 degrees. In a large bowl, whisk together the almond meal, Hemp Protein Powder, salt, granulated sugar, light brown sugar, and baking soda. In a separate bowl, use a fork to mash together 3 ripe bananas. To the bananas, add the applesauce, buttermilk, egg, and vanilla extract. Mix to combine. Form a well in the center of the dry ingredients and pour in the banana mixture. Fold the flour mixture into the banana mixture until just combined. Add in the chocolate chips and mix until just combined. Add the batter to baking cups that are already placed in the cupcake pan. Bake for 18-20 minutes at 400 degrees or until toothpick inserted into one of the center cupcakes comes out clean. Let cool in the cupcake tin for 10 minutes. Transfer the muffins into to a rack to help them completely cool.

Here is a link for other recipes incorporating hemp: <https://hempseedhealth.com/hemp-seed-recipes/>

References available upon request.

Ilian Garcia is a third year student majoring in Human Nutrition and Dietetic Science at New Mexico State University. She aspires to be a Registered Dietitian and hopes to expand her knowledge with a minor in the field of Food Science in the future.

For more information on this article, please contact Dr. Raquel Garzon, Nutrition and Wellness Extension Specialist, at rgarzon@nmsu.edu

Nutrition and Cognition

Cara Miller, Dietetic Intern

Over the last two decades, research has examined the effect of individual food components on cognition and cognitive decline. Individual nutrients such as vitamin E, B vitamins, n-3 fatty acid docosahexaenoic acid (DHA), folate, carotenoids, polyphenols, monounsaturated fat, and vitamin D have been shown to have neuroprotective benefits. Diets high in saturated fats and trans fats have been shown to increase cognitive decline and the risk of developing dementia. More recent research has focused on dietary patterns, which is important due to the biologically interactive nature of nutrients, and better reflects the complexity of diet and eating behavior.



Image source:
<http://followgreenliving.com/healthy-brain-healthy-food/>

The MIND (Mediterranean-DASH Intervention for Neurodegenerative Delay) diet has received much attention over the last few years for the claim that it may reduce a person’s risk of developing dementia. The MIND diet was developed by a team of Rush University researchers, which combines many of the components of the traditional Greek Mediterranean diet and the Dietary Approach to Stop Hypertension (DASH) diet. Both diets (Mediterranean and DASH) have been well researched and found to have a beneficial effect on reducing the risk of developing cardiovascular and hypertension disorders. However, only recently has research focused on the cognitive effects of either diet. A team of researchers explored the relationship of the DASH and Mediterranean-like diets and cognitive decline in a large sample of elderly adults. Their results showed both diets were associated with rates of cognitive decline. Researchers conducted a meta-

analysis to determine if a relationship existed between adherence to a Mediterranean diet and cognitive disorders and found an approximately linear relationship between the two.

The team who developed the MIND diet, conducted a study examining three dietary patterns, MIND diet, DASH diet, and traditional Greek Mediterranean diet, in relation to Alzheimer’s disease. Researches assessed the diets of 923 participants, ages 58-98 years. The results of this study showed, with a high adherence level all three dietary patterns were associated with a reduced incidence of Alzheimer’s disease, and a moderate adherence to the MIND diet was also associated with a reduced incidence of Alzheimer’s disease.

The 15 MIND diet foods consisted of 10 brain healthy food groups (green leafy vegetables, other vegetables, nuts, berries, beans, whole grains, fish, poultry, olive oil and wine) and 5 unhealthy food groups (red meats, butter and stick margarine, cheese, pastries and sweets, and fast/fried foods). The MIND Diet emphasizes daily intake of leafy green vegetables along with other vegetables and berries exclusively to other fruits. The DASH and Mediterranean diets recommend daily intake of fruit and vegetables. The MIND diet also recommends fewer daily servings of whole grains and weekly servings of fish compared to the other two diets.

Below is a table listing the recommendations of each diet.

MIND		DASH		Mediterranean		
Foods	Frequency	Foods	Frequency	Foods	Frequency	
Leafy green vegetables	6 servings/week	Vegetables	4-5 servings/day	Vegetables	Base every meal on these foods	
Other vegetables						1 serving/day
Berries	2 servings/week	Fruit	4-5 servings/day			Fruit
Whole grains	3 servings/day	Whole grains	7-8 servings/day			Whole grains
Nuts	5 servings/week	Nuts, seeds, legumes	4-5 servings/week			Nuts
Legumes	4 servings/week					Legumes
Fish	1 serving/week	Lean meat, poultry, fish	6 or less/day	Fish, seafood	At least 2 times/week	

Poultry	2 servings/week			Poultry, eggs, yogurt, cheese	Moderate portions daily to weekly
Olive oil	use as primary cooking oil	Low-fat dairy	2-3 servings/day	Healthy fats (olive oil, canola oil)	Include in each meal
Wine	1 serving (5 ounces)/day	Sodium	Less than 2,300 mg/day	Wine	Drink in moderation
Butter/margarine	less than 1 tablespoon/day	Sweets	5 or less servings/week	Sweets	Occasionally
Fast or fried food	less than once/week			Meat	Occasionally
Red meat	fewer than once/week				
Cheese	less than once/week				

While current research evaluating the effects of nutrition on cognition is promising, most of the studies are based on observational research and lack causal evidence. Previous research indicates body mass index (BMI) is associated with risk of dementia. Higher midlife BMI has been associated with a 75% increase in risk for developing Alzheimer's disease. Some research suggests chronic co-morbidities (arthritis, atherosclerosis, obesity, diabetes) and acute systemic inflammation contribute to the progression of dementia. Research has also shown malnutrition has a significant effect on cognitive decline. The well balanced and healthy nature of all three of these diets may contribute to reducing chronic co-morbidities and systemic inflammation. Continued research is needed to explore the causal relationship between nutrition and cognition. Currently, a 3-year research study is underway which will examine diet and brain health, comparing two parallel groups with two different mild calorie restricted diets.

So, what does this all mean? While, research is ongoing to determine the exact mechanisms and effectiveness of nutrition and prevention of cognitive decline, the benefits of following a healthy well-balanced diet are plentiful. Choosing any of the three dietary patterns mentioned, (MIND, DASH or Mediterranean style) can help reduce the risk of chronic diseases and may even reduce the risk of cognitive decline. There are many resources available online and in book stores for recipes and tips on how to incorporate these dietary patterns into our everyday lives. Smartphone and tablet applications are also available for each of diets mentioned, for both Android and Apple devices.

References available upon request.

Short Bio:

Cara Miller is a New Mexico State University Dietetic Intern and NMSU alumna. She graduated with Honors from NMSU earning a Bachelor of Science degree in Human Nutrition and Food Sciences. In her free time, she loves spending time with her family and exploring the outdoors.